

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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|--|---|---|
| In re Application of:                    | ) |   |
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| <b>Dong Ju MOON et al.</b>               | ) |   |
|  | ) | Group Art Unit: <b>Not Yet Assigned</b> |
| Application No.: <b>Not Yet Assigned</b> | ) |   |
|  | ) | Examiner: <b>Not Yet Assigned</b>       |
| Filed: <b>April 23, 2004</b>             | ) |   |
|  | ) |   |
| For: <b>SOLID OXIDE FUEL CELL (SOFC)</b> | ) |   |
| <b>FOR COPRODUCING SYNGAS AND</b>        | ) |   |
| <b>ELECTRICITY BY THE INTERNAL</b>       | ) |   |
| <b>REFORMING OF CARBON DIOXIDE BY</b>    | ) |   |
| <b>HYDROCARBONS AND</b>                  | ) |   |
| <b>ELECTROCHEMICAL MEMBRANE</b>          | ) |   |
| <b>REACTOR SYSTEM</b>                    | ) |   |

**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, VA 22313-1450**

Sir:

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)**

Pursuant to 37 C.F.R. §§1.56 and 1.97(b), applicants bring to the Examiner's attention the documents listed on attached Form PTO-1449. With exception of the U.S. patents, copies of the listed documents are attached. Applicants respectfully request that the Examiner consider the documents listed on attached Form PTO-1449 and indicate that they were considered by making an appropriate notation on this form. This Information Disclosure Statement is being filed with the above-referenced application.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the

documents as prior art against any claim in the application and applicants determine that the cited documents do not constitute "prior art" under United States law, applicants reserve the right to present to the Office the relevant facts and law regarding the appropriate status of such documents. Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: April 23, 2004

By: 

Ernest F. Chapman  
Reg. No. 25,961

Enclosures  
EFC/FPD/sci

## INFORMATION DISCLOSURE CITATION

|                  |                     |                 |                  |
|------------------|---------------------|-----------------|------------------|
| Atty. Docket No. | 05823.0265          | Application No. | Not Yet Assigned |
| Applicants       | Dong Ju MOON et al. |                 |                  |
| Filing Date      | April 23, 2004      | Group:          | Not Yet Assigned |

## U.S. PATENT DOCUMENTS

| Examiner Initial* | Document Number | Issue Date | Name          | Class | Sub Class | Filing Date If Appropriate |
|-------------------|-----------------|------------|---------------|-------|-----------|----------------------------|
|                   | 6,316,138 B1    | 11/13/01   | SATAKE et al. |       |           |                            |
|                   | 6,610,434 B1    | 08/26/03   | DRAPER et al. |       |           |                            |
|                   | 6,187,465 B1    | 02/13/01   | GALLOWAY      |       |           |                            |
|                   | 5,908,713       | 06/01/99   | RUKA et al.   |       |           |                            |

## FOREIGN PATENT DOCUMENTS

| Document Number | Publication Date | Country | Class | Sub Class | Translation Yes or No |
|-----------------|------------------|---------|-------|-----------|-----------------------|
|                 |                  |         |       |           |                       |
|                 |                  |         |       |           |                       |

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

|  |  |
|--|--|
|  | PARK, S. et al., "Direct Oxidation of Hydrocarbons in a Solid-Oxide Fuel Cell", Nature, Vol. 404, pp. 265-267, (March 16, 2000).   |
|  | MOON, D. J. et al., "Electrocatalytic Reforming of Carbon Dioxide by Methane in SOFC System", Catalysis Today, Vol. 3183, pp. 1-10, (2003).  |
|  | MOON, D. J. et al., "Electrocatalytic Reforming of Carbon Dioxide by Methane in SOFC Membrane Reactor System", Book of Extended Abstracts, The 9 <sup>th</sup> Korea-Japan Symposium on Catalysis, pp. 271-273, (May 14-17, 2003). |
|  | YOO, J. Y. et al., "Internal Reforming of Carbon Dioxide by Methane in SOFC System", Theories and Applications of Chem. Eng., Vol. 9, No. 1, pp. 1138-1141, (2003).  |
|  | ISHIHARA, T. et al., "Partial Oxidation of Methane Over Fuel Cell Type Reactor for Simultaneous Generation of Synthesis Gas and Electric Power", Chemical Engineering Science, Vol. 54, pp. 1535-1540, (1999).                     |
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| Examiner  | Date Considered   |
| *Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |   |
| Form PTO 1449   | Patent and Trademark Office - U.S. Department of Commerce |